

Natural England

Statement addressing the matters and issues for the Lodge Hill hearing on 22nd and 23rd May

This statement reproduces the numbering of the matters and issues, as circulated on 12th April. Only those matters and issues on which Natural England has provided advice are reproduced here. Natural England's advice is numbered consecutively and independently of the main numbering of the matters and issues.

1bi. Does the proposed allocation comply with paragraph 118 which indicates that proposed development on a SSSI should not normally be permitted....an exception should only be made where the benefits of the development....clearly outweigh both the impacts it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs?

The scope of Natural England's advice

1. Paragraph 118 of the National Planning Policy Framework (NPPF) applies specifically to determination of planning applications. Nevertheless there is benefit in considering it at plan stage in that it is a key factor in assessing the deliverability of development within the Lodge Hill draft allocation.
2. Compliance with this policy relies upon the balance between the importance of the benefits of development 'at this site' and the importance of the impact on the SSSI. Natural England recognises that there are development benefits which must be secured in Medway, and that these benefits can make a contribution to the imperative of growing the economy. Natural England's purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development. Natural England's advice therefore relates to the impacts of development on the natural environment. It is focussed on the potential impact on the SSSI and technical aspects in the consideration of alternatives which relate to the natural environment.

The scale of impact on the SSSI

3. At this site the impact of development on the SSSI would be particularly high. If development proceeds, it is likely that 83% of the nightingales on the site would be lost and 92% of its special grassland interest. These percentages are estimates. The rationale underpinning them is set out in Appendix 1 of this submission. Development which causes loss of such a high proportion of the interest of an SSSI is very unusual but is not unprecedented. In scale, a comparable example is the loss of an SSSI that resulted from the Cardiff Bay Barrage Act of Parliament in 1993, though this was before both NPPF and the previous Planning Policy Statement 9 *Biodiversity and Geological Conservation*, and therefore was permitted at a time in which the policy context was different.

Broader impacts on the national network of SSSIs

The conservation of nightingale

4. The purpose of the SSSI notification of Lodge Hill for nightingale is to contribute to the conservation of the British population of the species. If the scale of loss, predicted in paragraph 3 above, is realised, then the site safeguard provided by the SSSI mechanism may no longer be justifiable for nightingale at this site. At present we are aware of no other sites with greater

than 1% of the British population, which we would expect to consider as possible SSSIs, and which could therefore be expected to contribute to the broader protection of the species through this mechanism of site safeguard.

The conservation of MG5 grassland

5. MG5 is one of the scarcest and most threatened of England's lowland semi-natural grassland types, there being less than 6000ha of MG5 grassland in England
6. About 55% of this lies within SSSIs. There are around 400 SSSIs that have MG5 as an interest feature. Remaining sites are now typically small (80% of lowland meadows are less than 5ha in size) and isolated. Chattenden Woods and Lodge Hill thus represents a relatively large site in a local and national context. In summary this is an atypical variant of MG5, probably in part due to its management history, especially lack of appropriate management, and disturbance. Its current unfavourable condition does not detract from its value, particularly in terms of its unusually large size, which is a feature that the SSSI selection guidelines attach considerable importance to.
7. SSSI notification is one of the main mechanisms for conserving MG5 grassland, alongside purchase by conservation organisations and establishment of nature reserves and agreements concluded under The Environmental Stewardship Higher Level Scheme (HLS), since its conservation is reliant on extensive (as opposed to intensive) management techniques.

2a. Is providing compensatory habitat, rather than preservation in situ, the right approach for a site with nature conservation value of national importance?

Policy and law

8. If one were to consider solely what would be the best means of protecting the nightingale population currently at Lodge Hill, then a reliance on compensatory habitat could not be regarded as the preferred option. Reliance upon a compensatory approach is inherently riskier than avoidance or mitigation of impacts. This is the reasoning behind the avoid-mitigate-compensate hierarchy set out in paragraph 118 of the NPPF, which identifies compensation as a last resort.
9. SSSIs are afforded considerable protection in both law and policy. Nevertheless that protection is not absolute. The wording of NPPF, does allow for exceptions, though it makes clear that development which would harm an SSSI should not normally be permitted.
10. Many SSSIs are also accorded the higher protection of European sites, under the Habitats Regulations¹. Under these regulations, in cases of imperative need, overriding public importance and absence of alternatives, it is possible to destroy part of a site of European importance and compensate for that loss. Therefore, such an approach cannot be ruled out for a nationally important site.

Practical considerations

11. The relative effectiveness of habitat compensation compared to conservation *in situ* depends upon

¹ The Conservation of Habitats and Species regulations 2010

- a. Its reliability in establishing the key features of national importance and
- b. The relative likelihood that that they can then be sustained over the long term on a new site compared to the existing site

Reliability of habitat compensation for nightingale

12. In our letter of 30th November 2012 Natural England said that:
The advice from the British Trust for Ornithology (BTO) provides reason to consider that habitat compensation for the loss of nightingale at Lodge Hill would have a good chance of success, if of adequate scale and design, but it would not be without risk.
13. The BTO report² offers several examples of where nightingale have colonised recently established habitat and there is a relatively good understanding of the characteristics of the habitat that determine whether it will be suitable for nightingale.
14. The examples of nightingale colonisation are, however, cases in which this species has established of its own accord, not as a result of human interventions with the specific purpose of attracting nightingale. The BTO report says, *'We are unaware of any detailed published account that explicitly describes the establishment of a Nightingale population in relation to habitat creation and vegetation development on a formerly unoccupied site. Indeed, we are unaware of any instance where habitat creation for Nightingales has been attempted on any large scale. In this section we describe instances where, fortuitously, habitat has become recently available and has been colonised by the species'*.

Reliability of habitat compensation for MG5 grassland

15. Unlike habitat provision for specific species, the provision of like for like compensatory habitat for vegetation communities is more challenging, in that it is likely to result in a community which is different in its composition and relative abundance of species. In this case, the special grassland on site is not in favourable condition and therefore its present state does not provide a clear baseline against which to assess the change likely to arise from habitat compensation. Our detailed advice on habitat compensation for grassland is in Appendix 2.

Relative sustainability of habitat

16. Relative sustainability is a major consideration in assessing the risks of relying on existing and replacement habitat sites. At Lodge Hill the habitat mosaic within the recently extended SSSI is capable of being sustained in the long term for nightingale but is not without management challenges: for example, unexploded ordnance and the possibility of increased disturbance if military use ceases. In its current size and circumstances, the grassland could be restored to better condition and then sustained by traditional agricultural management.
17. The challenges for long term management which may be presented by replacement sites are unknown, since the sites have not been selected yet, but long term management requirements should be factored into site selection. If suitable sites are found and nightingales are attracted to them in numbers, the management which would be required to sustain the site population would be normal nature reserve management. Likewise the management which would be needed to sustain an MG5 grassland at a new site, is perfectly normal nature reserve management.

² Chris M. Hewson & Robert J. Fuller, *Factors Potentially Affecting the Viability and Success of Biodiversity Offsetting to Compensate for Nightingale Habitat Loss*, October 2012

2bi. How much compensatory habitat is required and how likely is it that sufficient land of a suitable type will be made available and what potential adverse impacts may arise, such as loss of good quality agricultural land?

Calculations of scale

18. The report provided by Environment Bank Limited (EBL) for Medway Council considered habitat compensation for nightingale. Our letter dated 14th January 2013 on the report, advises that:

'it might be possible to compensate for losses within the mid range figure (c650ha) suggested but it would be prudent to plan on the basis of the high distinctiveness figure (990ha)'

19. In applying the metrics used by the Defra offsetting pilot, EBL describe how the metrics apply a multiplier to reflect the distinctiveness of habitat. The report says that, 'Any designated habitats or habitats of significant biodiversity value are defined as 'high''. Since much of the site has now been designated as an SSSI, it could be argued that weight should be given to the high distinctiveness figure of 990ha. It should be noted however, that only 210ha of the draft development allocation overlaps with the extended SSSI, which is much less than the area of 287ha of habitat which generated the offsetting metrics calculations presented by EBL. Thus, if the requirement of scale is calculated using the offset metrics and builds in an assumption of high distinctiveness for all the nightingale habitat of national importance (that in the SSSI), it would not be as much as 990ha, and it might be significantly lower.

20. It should be emphasised also that the scale calculations made at this stage are very approximate. As it is not normal in assessment of a development plan, to consider the detail of specific habitat compensation sites, the metrics are reliant upon assumptions, and could be substantially altered by application to specific sites. Given that it is necessary to consider the broad scale of the possible requirement, to assess whether it would be deliverable, we have indicated that it is prudent to plan on the basis of the higher end of range of scales calculated but we do not discount the possibility that a lower scale may in practice suffice.

The availability of land for habitat compensation

21. The advice that we have offered on the likelihood that sufficient land of a suitable type will be made available is contained in our letter of 14th January 2013:

'The work undertaken by Greening the Gateway Kent and Medway (GGKM) suggests that: a large proportion of Kent provides conditions which may be suitable for habitat creation; target areas of high potential can be identified; and that landowners are willing to negotiate over the provision of land. Securing the land on the scale which may be required will be a challenge and therefore, in itself presents a risk to delivery.'

22. With the agreement of Medway Council, the Defence Infrastructure Organisation and Land Securities, we consulted the Environment Agency on two of the sites that were identified by GGKM as of high potential for habitat compensation. These sites are within the scope of an adopted shoreline management plan (SMP), which puts in place a policy of managed realignment, which may take effect in 20 years on the sections of shoreline containing these two habitat compensation site options. The Environment Agency has confirmed (in Appendix 2) that this SMP policy remains in place at these locations. If managed realignment was to take place as suggested by these policies, it would mean that these site options could not be relied upon as nightingale habitat, as they may be flooded regularly by sea water.

23. These two sites add up to 640ha out of a total 1001ha of site options described as of high potential by GGKM. They are just two of the options identified, and it is likely that additional sites will be identified if the search is extended, but they are illustrative of the challenge that procurement of sites may generate.

The effects on agricultural soils

24. Natural England, on behalf of Defra, advises on the implications of development for Best and Most Versatile Agricultural (BMV) land. The implications of the compensatory habitat for BMV land cannot be judged with certainty because at this stage only a sample of site options can be considered, from a site search which was not exhaustive. Moreover for two of the 'high potential' options identified by GGKM, there is some uncertainty about the exact location of the site because the maps provided are unclear. Our detailed advice on the information provided is in Appendix 3. In summary this advice is:
- a. Whilst habitat compensation should be permanent, the effects of scrub creation on soil (in making the preferred habitat of nightingale) are reversible.
 - b. It appears likely that substantial lower quality agricultural land can be found with the 'high' potential sites. In so far as conclusions can be drawn from this about sites which may eventually be selected, this means that
 - i. the risks of impact on agricultural productivity are relatively low
 - ii. there is relatively low risk of habitat compensation being undone by reversion to agriculture in the future.

2bii. What are the likely consequences of the time lag between loss of habitat at Lodge Hill and the provision of new habitat if development proceeds as currently proposed? Alternatively what are the implications for the Core Strategy if development at Lodge Hill is delayed to allow for new/restored/improved habitat to become available?

25. The risks arising from such a time lag are that: there will be insufficient nightingales available to colonise newly created habitat at a time when it is ready to receive them; and that as a consequence there may be a reduction in the Kentish and British nightingale populations. Natural England's advice on the consequences of time lag for nightingale was provided in Natural England's letter to EBL dated 30th November, and was:

'whilst we would advise that there is a risk in the time lag, we do not consider this so grave as to rule out habitat compensation as worthwhile for nightingale, as long as measures are taken to minimise this risk..... this risk could be reduced by adjusting the scale and distribution of habitat compensation.'

26. This is consistent with the Environment Bank³ report of BTO advice that *'temporary loss of habitat probably wouldn't lead to a permanent reduction in the breeding population, provided that a suitable source population persisted in the area and that the compensatory habitat was close to it. It is believed that the Kent population of nightingales is, however, still in decline so it is difficult to predict with certainty whether this condition will be met, given the lag before functional habitat becomes available. All existing populations require constant top-up from recruits anyway – and it seems possible that Lodge Hill is one source of such recruits for both its own and other populations, which would increase its importance from a conservation perspective,*

³ Biodiversity Offsetting to compensate for nightingale habitat loss at Lodge Hill, Kent, Environment Bank Ltd December 2012.

making it a key site for nightingales in Kent. On the other hand, the species occupies successional habitat, probably has only a moderate degree of fidelity to its natal area and has fairly good dispersive ability, both of which would increase the chances of recruits from other areas being available to occupy the newly created offset habitat, and would reduce the chances of permanent reduction in the Kent population.'

27. Medway Council and Land Securities have advised Natural England that the land take for development could be phased in accordance with the phasing of development proposed, over a period of ten years or more. Whilst loss of a substantial amount of current nightingale habitat would be inevitable in the first phase of development, this phasing also has the potential to reduce the effect of time lag.

28. Natural England is not able to advise on the implications of delay for development.

2b⁴. To what extent can the loss of the area of MG5 Grassland be mitigated by changes to the Master plan and if offsite provision is necessary what are the risks to delivery?

29. We have been advised by the Thomson Ecology, Land Securities and Medway Council that it is not possible to retain the MG5 grassland. Even if parts of the grassland could be retained within the proposed development, there is a question of whether they could be managed with agricultural grazing and hay cutting, as would be required in the long term to restore and maintain them. The advice we have been given is that even if there was no requirement for the substantial buffer strip (which has been proposed between the development and the former SSSI boundary), there is insufficient flexibility in the development layout to allow retention of any of the grassland.

30. We have received no information to assess the suitability of any of the suggested site options for MG5 grassland creation, though our advice is that some of the sites which have been identified as high potential for nightingales, would not be suitable for MG5 creation. However it is also possible that some nightingale sites might also be suitable as MG5 sites.

31. If off-site provision is necessary, receptor site preparation and transfer of material from the donor site may need to be done in a certain season but these should be relatively short operations and could probably be planned into the existing proposals for phasing of development.

3a. Does the SA Addendum provide a robust assessment of alternative options?
In particular

3ai. Are there other reasonable alternatives that should be evaluated in greater detail bearing in mind the changing circumstances in relation to Lodge Hill? For example, is it right to reject a more dispersed pattern of development without a more detailed evaluation of what that might mean in practice?

32. The plan explored 5 options. The scoring in the SA addendum reflects that development of the Lodge Hill site would have the greatest biodiversity impact of these options. Whilst there is

⁴ Numbered as 2b in the *Matters and issues for Hearing on 22nd May.doc*, though this numbering duplicates that of another issue within the document

other undeveloped land in Medway where development would have a lower biodiversity impact, it is not for Natural England to weigh up the wider issues affecting their selection.

4. Is the 'very positive' score given to the Lodge Hill option in relating to previously developed land justified?

a. How much of the development area meets the definition of previously developed land set out in Annex 2 to the framework?

33. Annex 2 of NPPF defines Previously Developed Land (PDL) as '*Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure.*' There are a number of exclusions in this definition, including '*land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time.*'

34. Lodge Hill contains buildings and hard standing associated with its military use. However, much of the area is covered by grassland, scrub and woodland habitats that do not fall within the definition of PDL as they can be considered to have blended into the landscape. As part of the nightingale offsetting work, Environmental Bank Ltd (EBL) mapped the various habitats on the Lodge Hill site. The areas that can be ascribed to PDL are:

Buildings	2.85 ha
Hardstanding	37.71ha
Bare Ground	1.02 ha
Amenity Grassland	7.63 ha
Ephemeral vegetation	0.20 ha
Ruderal vegetation	6.79 ha

35. This adds up to 56.2 ha out of a total 327.8 ha within the red line development boundary, or 17% of its total area.

4b. Should the scoring be tempered by the Framework's core planning principle that reusing previously developed land should be encouraged, provided that it is not of high environmental value?

36. Natural England's advice is that only 17% of the site meets the PDL criteria. This is not in one block but spread across the Lodge Hill site, reflecting the scattered nature of the buildings and hard standing. The remaining 83% of the site has grassland, scrub and woodland habitats that as a whole give the site high environmental value. Therefore the 'very positive' score given in the SA Addendum for SA Objective 7: Previously Developed Land is not appropriate. Given the environmental value of the site, Natural England advised Medway Council on 21st February that that this should be re-scored as 'very negative'.

Appendix One: Potential level of impact on nightingales and MG5 grassland

Nightingale

The nightingale survey for the Chattenden Wood and Lodge Hill area undertaken as part of the 2012 national nightingale survey by the British Trust for Ornithology (BTO) estimated that there were 69 territorial males within the Lodge Hill draft development area with a further 15 in the adjacent Chattenden Woods Site of Special Scientific Interest (SSSI). All 84 territories lie within the new Chattenden Woods and Lodge Hill SSSI. During the validation of the data in 2013, the BTO revised the total number of territorial males upwards from 84 to 85, all of which fall within Chattenden Woods and Lodge Hill SSSI.

The BTO⁵ reports that *'it can reasonably [be]assumed that all of the birds within the Lodge Hill site will be lost as a consequence of the development, although a small number may persist'. They go on to say that 'This will be a caused by a combination of loss of habitat comprising territories, loss of habitat that is very likely to form parts of the wider home ranges of nightingales, reduction in quality of small fragments of habitat remaining which are not likely to be functionally used for nightingales, reduction in probable social attraction and the proposal effects of disturbance and cat predation. An unknown proportion of the birds in the Chattenden Woods SSSI [which has now been incorporated within the enlarged Chattenden Woods and Lodge Hill SSSI] may persist but due to effects of disturbance, cat predation and reduction in social attraction it is not clear how great this proportion is and it could be quite small.'*

The effects of indirect impacts upon nightingale populations from infrastructure developments are also discussed by Holt et al ⁶ who state that *'During the second half of the twentieth century, new infrastructure and housing is likely to have contributed to the decline of the nightingale in England, particularly as the pace of development has been greatest in the southeast in the species' core range. In addition to direct loss of habitat, residential development may reduce the quality of adjacent nightingale habitat through factors such as disturbance and predation by cats. Although there is no clear evidence for such indirect effects, the subject is worthy of further research.'*

Within Section 8 of the 2012 BTO report, it is stated that due to a number of uncertainties *'it is unrealistic to firmly predict the persistence of any nightingales within the Lodge Hill development itself whilst serious reductions could occur in Chattenden Woods SSSI [now incorporated within the enlarged Chattenden Woods and Lodge Hill SSSI]and neighbouring areas. The reduction in the number of nightingales will therefore theoretically be between 69 and 84 so we will take a hypothetical mid-point of 75.'* This is 88% of the site population of 85 territorial males.

This BTO estimate assumes that all of the nightingale will be lost from the Rough Shaw and Lodge Hill part of the draft development allocation. However, we understand this to be outside the likely development footprint⁷. What is more, if development proceeds, this part of the site could be protected by a buffer strip and other access management measures. Whilst these measures may not remove all impact, we would expect them to have some mitigating effect. At this stage in the plan process, before all the detail of layout and mitigation measures are clear, it would be appropriate to consider the nightingale on the Rough Shaw and Lodge Hill part of the site to be at the same level of risk to development impacts as those elsewhere in the former Chattenden Woods SSSI. Thus it

⁵ Hewson, CM & Fuller, RJ (2012) Factors affecting the viability and success of biodiversity offsetting to compensate for nightingale habitat loss

⁶ Holt, CA, Hewson, CM and Fuller, RJ (2012) The Nightingale in Britain: status, ecology and conservation needs. British Birds 106 64-100

⁷ Lodge Hill Outline Planning Application Environmental Statement Volume 2 Drawings dated October 2011

would be appropriate to apply the theoretical midpoint used by BTO also to the numbers of nightingale in Rough Shaw and Lodge Hill.

There are three nightingale territories outside the indicative development layout but immediately on its boundary which appear at high risk from development. These could justifiably be excluded from the mid calculation and assumed as likely to be lost.

These factors overall would suggest a slightly lower level of loss than assumed by BTO:

- 53 territories within the indicative development layout

- 3 territories very close to the edge of the indicative development layout

- 14.5 (50%) of the other territories in the former SSSI, including Rough Shaw and Lodge Hill)

In total this adds to loss of a potential 70.5 territories, which is equivalent to 83% of the site population.

MG5 grassland

The area of MG5 grassland identified last year within the indicative development layout is 11.6ha. This adds to approximately 1ha on Rough Shaw. If the former is lost to development and the latter retained, that would be equivalent to a 92% loss of this habitat from within the new SSSI area.

Appendix 2 Habitat compensation for grassland

Nature conservation guidelines for semi-natural terrestrial habitats in both England and UK, including species-rich semi-natural grasslands, are, first and foremost, predicated on conserving them *in situ*.

In the event that areas of semi-natural grassland cannot be conserved in situ due to an overriding case for land use change such as a development then any offsite compensatory provision such as by turf translocation or re-creation by seeding or hay transfer will result in a habitat of lesser value (Bullock et al 1997⁸, Jefferson et al 1999⁹).

The Joint Nature Conservation Committee¹⁰ advises that off-site compensatory provision should be considered a 'last resort' and as 'partial' compensation. This is based on the premise that translocation of habitats (and indeed by implication, habitat creation by other means) cannot completely reproduce the essential environmental conditions (geology, soil conditions, hydrology, aspect and topography etc) and the ecological processes, which determine the composition of the original plant and animal communities. The available evidence from the last 20 years shows that the vegetation of translocated sites, even when undertaken using best practice methods, is different in its composition and relative abundance of species compared to the original in situ habitat. This is even the case on habitats that do not have particularly complex soils/hydrology/topography such as some neutral and calcareous grasslands. In addition, the habitat has been separated from its ecological, historical and cultural context.

The issue of grassland habitat translocation was tested in a Planning Inquiry in Devon 1997 involving a proposal to translocate an area of MG5 grassland to accommodate a ball clay waste tip extension (DETR 1998¹¹).

The Inquiry Inspector concluded that:

'SSSIs should be retained in situ, and translocation is, as English Nature claims, a last resort when faced with the inevitable loss of the SSSI'

'For my part, in addition to the uncertainty over continuing divergence¹, I am more inclined to English Nature's contention that the transplanted sites can no longer be described as natural/unimproved.....Accordingly, in terms of the national network of SSSIs, transplantation would constitute a loss. Accordingly, whereas translocation may be the best form of mitigation when the loss of the SSSI is inevitable, I do not see the potential success at replication as

⁸ Bullock, J.M., Hodder, K.H., Manchester, S.J. and Stevenson, M.J. 1997 Review of information, policy and legislation on species translocation. JNCC Report 261. Joint Nature Conservation Committee, Peterborough.

⁹ Jefferson, R.G., Gibson, C.W.D., Leach, S.J., Pulteney, C.M., Wolton, R. and Robertson, H.J. 1999 Grassland habitat translocation: the case of Brocks Farm, Devon. English Nature Research Reports No. 304, Peterborough.

¹⁰ Joint Nature Conservation Committee 2003 A Habitats Translocation Policy for Britain. Joint Nature Conservation Committee in conjunction with the Countryside Council for Wales, English Nature and Scottish Natural Heritage. JNCC, Peterborough.

¹¹ Department of the Environment, Transport and the Regions 1998 Inspector's report and Secretary of State's letter. Proposed extension of waste tip at Newbridge Ball Clay works at Kingsteignton, Devon. Appeal by ECC International Limited. Reference APP/K1100/A/96/269587.

justifying the transplant when the arguments are less forcible. The bottom line is that the SSSI would be lost'

The Secretary of State agreed:

'The Secretary of State fully supports the Inspector's conclusions in paragraphs 10.32 to 10.35 of the report on the issue of possible translocation of the SSSI, or its loss, and is satisfied the translocation of the SSSI in its entirety would constitute, for all intents and purposes, a loss of habitat which would be best avoided'

"However, the expectation should not be one of replication, but more the creation of a habitat of interest, and the best that could be achieved under the circumstances"

Partial retention

If it is possible to retain only part of the grassland area, the reduction in area may have the following effects

- As well as reducing the area of a scarce, biodiverse semi-natural grassland habitat, partial retention may: i) reduce the range of species present, depending on their current distribution across the three blocks of grassland and; ii) reduce the population sizes of species making them potentially at higher risk of extinction
- Evidence suggests that even small grassland sites can be conserved in perpetuity provided continuation of appropriate management is ensured. However, smaller sites in general tend to be more problematical in terms of ensuring sustainable management by cutting and/or grazing. This is why, for example in the Environmental Stewardship Higher Level Scheme (HLS), the English agri-environment scheme, there is a supplement for the management of small fields (HR6) and difficult sites, including those that are isolated (HR7). In addition, practical experience indicates that grasslands that become fully or partly isolated from favourable land use (primarily pastoral agricultural land) for example, as a result of developments such as housing or road construction, present greater challenges to ensuring favourable management and are at increased risk of management abandonment.

Appendix 3

Agricultural soils impacts

Background

The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. The best and most versatile (BMV) land is defined as Grades 1, 2 and 3a by policy guidance (see Annex 2 of NPPF). This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non food uses such as biomass, fibres and pharmaceuticals. Current estimates are that Grades 1 and 2 together form about 21% of all farmland in England; Subgrade 3a also covers about 21%.

The ALC system is used by Natural England and others to give advice to planning authorities, developers and the public if development is proposed on agricultural land. The Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended) refers to the best and most versatile land policy in requiring statutory consultations with Natural England¹².

Government planning policy for protecting best and most versatile land England is set out in the National Planning Policy Framework (NPPF) published in March 2012 (paragraph 112). Decisions rest with the relevant planning authorities who should take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality.

When considering the impact of land use change on the national stock of best and most versatile a key question is the reversibility of the change in use i.e could the land be returned (or in the case of mineral working be restored) to high quality agricultural use in the future if it were ever required, and therefore whether its long term potential can be safeguarded for future generations. The view normally taken is that 'hard' development such as built development is seldom reversible whilst for some 'softer' development such as for recreation, amenity or nature conservation uses this may be possible, depending upon the amount of soil disturbance or other interventions involved beyond those normally associated with agricultural production. However, in terms of overall sustainability, it is better at the outset to plan to minimise development on high quality agricultural land rather than to rely on the possibility that for softer uses it may be reversible at some point in the future. Planned avoidance of high quality land at the outset has the potential benefit of reducing the pressure for agricultural intensification on the remaining stock of agricultural land.

BMV land and Habitat Creation projects

Habitat creation or restoration projects can often fall within the definition of agriculture¹³ (e.g if maintained by grazing), and so may not involve any change of use as far as the planning system is concerned. They often involve de-intensification of agricultural use or the adoption of a different system of agricultural production. This does not normally have any impact on the long term physical quality of the land as defined by the ALC system. Similarly a change from agriculture to a forestry or

¹² This responsibility transferred from Defra Secretary of State to Natural England in 2012. Prior to 2012 Natural England was only responsible for minerals & waste development under part 8 of the NERC Act Agreement. Defra facing staff in the former Government Office network (abolished in 2011) were formerly responsibly for these consultations for non minerals & waste development. Natural England is therefore in the process of developing its capability to respond to these cases.

¹³ The definition of agriculture is given in section 336 of the Town & Country Planning Act 1990

woodland use does not normally require planning permission and has historically been regarded as a reversible use in terms of the protection of high quality agricultural land.

Agricultural Land Quality – possible habitat compensatory sites

Four sites have been reported by GGKM as offering ‘high’ potential for habitat creation opportunities and Natural England has given these a very preliminary evaluation in terms of soils and agricultural land quality using Webmap datasets. Only more detailed ALC field surveys can provide confirmation of the grades present. Initial conclusions are that overall there is the potential to find significant areas of poorer quality (non BMV agricultural land) within these broad locations as described below:

Site	Area(ha)	Map information	Soils	Comment
Site 6 Cleve Hill	400	Broad brush scale shown as 3	Wallasea 1 difficult to work, impeded drainage	Unlikely to contain BMV. Most likely 3b, ie moderate quality
Site 7 Hinxhill Estate	70-100	Range of ALC grades from Grades 2, 3 and 4 and high, moderate and low likelihood of BMV land from broadbrush maps	To south of Hinxhill are drought-prone well drained sandy loams with coarser (more sandy) subsidiary soils. To the north heavy clayey soils which are unlikely to be better than Subgrade 3b (moderate quality)	Varies between Grade 2 (very good quality) and 4 (poor quality). GGKM maps unclear.
Site 8 Beachborough Park	291	Grades 2, 3 and 4 and high, moderate and low likelihood of BMV land broadbrush maps. A detailed ALC map shows grades 2 and 3a corresponding to what is probably the higher quality land along the motorway /corridor. North of the M20 around Ashley Wood poorly drained heavy clayey soils are unlikely to be better than Subgrade 3b (moderate quality).	Drought-prone well drained sandy loams with coarser (more sandy) subsidiary soils	Land Quality is variable depending upon the location. GGKM maps unclear.
Site 14 Burden Bros Estate	240	ALC Grades 3 and 4 and low likelihood of BMV land on broadbrush maps	difficult to work clayey marine and London clay alluvial soils with impeded drainage	Suggested as predominantly Subgrade 3b (moderate quality land)

Appendix 4 Environment Agency advice on potential habitat compensation sites

Lodge Hill Mitigating Habitat site options

Briefing Note

April 2013

This briefing note sets out the Environment Agency's long term plans for the defences at Cleve Hill and to the East of the Isle of Sheppey.

Cleve Hill

Our plans for the flood defences at Cleve Hill are set out within the Isle of Grain to South Foreland Shoreline Management Plan (SMP). The Cleve Hill site is behind policy unit 4a 07a, Faversham Creek to Sportsman Pub.

If the current alignment were to be held in the long-term, coastal squeeze, together with a diminished supply of natural beach building sediment would mean substantial hard defences and/or significant beach management would be needed. As a result, the medium and long term policy for this area is for managed realignment. This will avoid the need for such defences, possibly creating cost savings and environmental enhancement. This is the policy we have at present and we have to assume we will want to realign this area in 20 years time.

The Environment Agency investigated purchasing Cleve Hill Farm for managed realignment in November 2010 but decided not to purchase it at that time. However we will review this in the second epoch.

East of Isle of Sheppey

From the plan sent through on 20 March this area is covered by Isle of Grain to South Foreland SMP (policy unit 4a 06) and the Medway Estuary and Swale SMP (policy unit E4 25). The policy for this area is for managed realignment in the short, medium and long term.

The shoreline here includes a sand and shell beach and spit, backed by nationally and internationally designated saltmarsh and low lying coastal grazing marsh. With rising sea levels it is anticipated that it will become increasingly difficult to maintain a beach along this frontage. As with Cleve Hill, if the current alignment were to be held in the long term, coastal squeeze, together with a diminished supply of natural beach building sediment would mean substantial hard defences and/or significant beach management would be needed. Managed realignment will avoid the need for such defences, possibly creating cost savings and environmental enhancement.

Summary

We are currently carrying out the Medway Estuary and Swale Habitat Process Study which was a recommendation from the SMP. This study will feed into the Medway Basin and Swale Strategy which we plan to start in 2014 (funding dependent). This strategy will look in more detail at the management of the

coastline and potential flood risk management schemes. Once complete, this strategy might give more information on the future of these site .

Although we currently maintain the defences along both these stretches of coast, as they reach the end of their life we expect them not to be economic to replace and therefore, in line with the managed realignment policy, we would withdraw maintenance. As a result, in the second epoch we would not be able to guarantee the maintenance of these defences. However the landowner could continue to maintain them for the benefit of the habitat created behind. If either of these sites were to be purchased to create nightingale habitat we would expect that the defences and future maintenance of these would be taken on by the landowner.

The policy units are explained in more detail in the SMP's which can be found at the following links:

<http://www.se-coastalgroup.org.uk/iogtosf2008/>

<http://www.se-coastalgroup.org.uk/statements-maps-and-tables-mes/>